

## CREDIT OPINION

26 May 2016

### Update

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#### RATINGS

##### Deutsche Bank AG

Domicile	Frankfurt am Main, Germany
Long Term Rating	A3
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

*Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.*

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## Deutsche Bank AG

### Post Rating Action Update

#### Summary Rating Rationale

On March 23rd 2016, we downgraded the ratings of Deutsche Bank AG and affiliates, including the bank's long-term deposit rating, to A3 from A2, its senior unsecured debt rating to Baa2 from Baa1, its standalone baseline credit assessment (BCA) to ba1 from baa3, and its counterparty risk assessment to A3(cr) from A2(cr). Deutsche Bank's short-term ratings and short-term counterparty risk assessments were also downgraded to Prime-2 from Prime-1 and to Prime-2(cr) and Prime-1(cr), respectively.

Deutsche Bank is engaged in a multi-year undertaking to simplify its businesses, fortify its controls, strengthen its balance sheet and stabilize its earnings. Once substantial progress has been made, Deutsche Bank will have a reduced risk profile, more balanced earnings and operate with more conservative levels of leverage. Accomplishing these objectives will be positive for Deutsche Bank's creditors, and the newly appointed management team is diligently attempting to execute this plan. Achievement of the strategy would be credit positive. Creating a more balanced business mix and operating with reduced leverage and lower ROE aspirations would protect bondholders.

However, the rating downgrade reflects increased risks to Deutsche Bank's ability to successfully execute this ambitious, creditor-friendly plan. Deutsche Bank's performance over the last several quarters has been weak, and substantial operating headwinds, including continuing low interest rates and macroeconomic uncertainty, will challenge the firm. These forces will likely result in periods of subdued customer volumes and revenues within Deutsche Bank's retail, asset management and institutional franchises, which could hinder or delay Deutsche Bank's ability to make progress on its plan, as this would be contingent on the firm's ability to balance the impact of plan-related expenses on its internal capital generation against the firm's growing regulatory capital requirements.

Despite the near-term earnings challenges, the firm's overall solvency and liquidity profiles support its creditworthiness and provide the firm time and flexibility to adjust the plan as conditions warrant. Deutsche Bank's solvency is supported by a solid overall capital and litigation reserve position, as well as its asset risk profile.

The ba1 standalone baseline credit assessment (BCA) of Deutsche Bank reflects the firm's modest profitability, elevated earnings volatility and high dependence on capital markets businesses. These challenges are balanced in part by the more stable retail banking, transaction services and asset and wealth management franchises.

## DEUTSCHE BANK'S BCA IS SUPPORTED BY ITS STRONG+ MACRO PROFILE

Deutsche Bank's Strong+ macro profile is mainly driven by its exposure to Germany and the United States, to which we assign a 'Very Strong-', and partly offset by its exposures to other European countries which have weaker macro profiles (i.e. Spain and Italy). As the largest bank in Germany, Deutsche Bank benefits from an environment with very high economic, institutional and government financial strength and very low susceptibility to event risk. Operating conditions for the German banking system are, however, constrained by high fragmentation in an over-saturated market, low fee income generation and intensifying competition for domestic business.

### Credit Strengths & Challenges

- » Execution challenges relating to ongoing reengineering
- » Significant reliance on capital markets activities
- » Strengthened capital and leverage position helps to mitigate against tail risk
- » High earnings volatility and modest overall profitability
- » Development of stronger and more resilient lines of business outside capital market activities
- » Strong liquidity position mitigates market funding reliance
- » Substantial volume of and subordination beneath deposits, and significant volume of senior debt resulting in deposit and senior debt ratings benefiting from three-notches and one-notch LGF uplift respectively from the BCA
- » Moderate probability of government support resulting in one-notch uplift from BCA for debt and deposits

### Rating Outlook

The outlook's on Deutsche Bank's ratings are stable, reflecting the potential long-term benefits to creditors of the five-year plan through 2020. Deutsche Bank maintains a sound liquidity position which is supportive of the bank's credit fundamentals while management is deploying many operating and financial tools to execute this multi-faceted re-engineering.

### Factors that Could Lead to an Upgrade

Steady progress toward improving profitability and reducing tail risks in the form of outstanding litigation and the run-off of legacy positions as well as material progress in rebuilding the information technology environment of the bank, could lead to a rating upgrade.

### Factors that Could Lead to a Downgrade

The current ratings incorporate the possibility for a modest loss and substantial litigation costs in 2016 and the potential for limited profitability in 2017. Further downward pressure could occur if capital ratios weaken substantially or if liquidity declines sharply.

### Key Indicators

Exhibit 1

#### Deutsche Bank AG (Consolidated Financials) [1]

	3-16 <sup>2</sup>	12-15 <sup>2</sup>	12-14 <sup>2</sup>	12-13 <sup>3</sup>	12-12 <sup>3</sup>	Avg.
Total Assets (EUR billion)	1131.4	1085.1	1045.2	1093.6	1236.6	-2.2 <sup>4</sup>
Total Assets (USD billion)	1289.3	1178.8	1264.7	1506.9	1630.3	-5.7 <sup>4</sup>
Tangible Common Equity (EUR billion)	46.4	47.3	49.6	37.1	35.2	7.1 <sup>4</sup>
Tangible Common Equity (USD billion)	52.8	51.4	60.0	51.1	46.5	3.3 <sup>4</sup>
Problem Loans / Gross Loans (%)	1.7	1.9	2.3	2.6	2.6	2.2 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	11.6	11.9	12.6	12.3	10.6	12.0 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	14.6	15.6	17.1	23.7	25.8	19.3 <sup>5</sup>

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

Net Interest Margin (%)	1.5	1.6	1.4	1.3	1.4	1.4 <sup>5</sup>
PPI / Average RWA (%)	1.0	0.3	1.0	1.1	1.3	0.8 <sup>6</sup>
Net Income / Tangible Assets (%)	0.1	-0.1	0.3	0.0	0.2	0.1 <sup>5</sup>
Cost / Income Ratio (%)	87.6	95.8	87.6	88.6	86.1	89.2 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	29.4	29.9	29.6	34.3	38.0	32.2 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	38.5	40.5	37.6	37.2	42.0	39.1 <sup>5</sup>
Gross loans / Due to customers (%)	76.7	76.5	77.1	72.4	69.7	74.5 <sup>5</sup>

[1] All figures and ratios are adjusted using Moody's standard adjustments [2] Basel III - fully-loaded or transitional phase-in; IFRS [3] Basel II; IFRS [4] Compound Annual Growth Rate based on IFRS reporting periods [5] IFRS reporting periods have been used for average calculation [6] Basel III - fully-loaded or transitional phase-in & IFRS reporting periods have been used for average calculation

Source: Moody's Financial Metrics

## Detailed Rating Considerations

Our assigned Asset Risk score of baa3 incorporates the execution risks associated with Deutsche Bank's ongoing reengineering program - as well as the market, credit and operational risks and periodic concentration risks inherent to Deutsche Bank's capital market activities.

We also note as of January 1st 2016 there is a new organisation of the business units. The new business units are as follows; Global Markets (GM), which contains the sales and trading businesses; Corporate & Investment Banking (CIB) which contains the banks' global transactions banking and corporate finance businesses; Private, Wealth & Commercial Clients (PWCC) which contains the banks' remaining retail activities and private wealth customers and Deutsche Asset Management (DAWM) which retains the banks' institutional wealth management clients.

## EXECUTION CHALLENGES RELATING TO ONGOING REENGINEERING

Since 2010 the earnings volatility of Deutsche Bank has been higher than many of its peers, given heightened restructuring and litigation costs and the drag of its legacy portfolio. Deutsche Bank is engaged in a multi-year undertaking to simplify its businesses, fortify its controls, strengthen its balance sheet and stabilize its earnings. The bank increased its capital targets - to at least 12.5% from >10% Core Equity Tier 1 and to at least 5% from 3.5% leverage ratio -, lowered its profitability target to >10% return on tangible common equity from >12% return on equity and recommitted to a ~65% cost income ratio. Additionally, management disclosed its plan to deconsolidate Postbank (A3, (P)Baa2 negative, ba1), its German retail banking subsidiary, and to reduce assets within the capital market division by EUR130-150 billion net, while investing EUR2.5 billion into its asset and wealth management, retail banking and transaction banking divisions, and enhancing digital capabilities, shutting branches and shrinking its foreign footprint.

The full achievement of the new strategy would be positive for bondholders. Strengthening and stabilizing earnings in these businesses would create better balance to the business mix and help protect bondholders against the volatility of capital markets businesses through the cycle. Today, however, the benefits to creditors of future higher capitalization, lower leverage and more conservative ROE targets are largely offset by the considerable execution risks of the plan - as management attempts to strengthen profitability and continue to rebalance the earnings mix over the next three to five years

## SIGNIFICANT RELIANCE ON CAPITAL MARKETS ACTIVITIES

Deutsche Bank has a heavy reliance on capital markets activities for income generation - capital markets activities represented roughly 43% of core bank revenue in 2015. This is a principal factor in our one notch downward adjustment for opacity and complexity in the scorecard.

Like many of its competitors, Deutsche Bank's capital markets businesses are undergoing extensive reconfiguration in the face of considerable regulatory change. Deutsche Bank's strategy is to defend its position amongst the major global investment banks, as many middle-tier players exit various businesses and shrink their global trading platforms. In the long run, management believes that European fixed income markets should continue to grow due to regulatory and demographic changes and the firm is targeting selected investment in its US capital markets platform.

At the same time management has shrunk the balance sheet, front office head count and operating costs within the division by double digit percentages since the 2011 peak. As part of the new strategic plan, the firm plans to cut the division's leverage exposure by EUR130-150 billion, reducing repos and long-dated non-cleared derivatives and refocusing its clients and product perimeters. We

caution that revenue attrition associated with these planned balance sheet reductions may be greater than management's estimates of EUR600 million of run rate revenue loss.

### **STRENGTHENED CAPITAL AND LEVERAGE POSITION HELPS TO MITIGATE AGAINST TAIL RISK**

Our assigned Capital score of ba1 reflects the future headwinds on Deutsche Bank's capital ratios from increased regulatory costs risk and possible pending litigation.

Deutsche Bank capital and leverage ratios are now more in line with peers helped by EUR8.5 billion of capital raised in June 2014 and EUR5 billion of Additional Tier 1 capital. The bank expects the capital ratio to benefit by roughly 50 basis points through the sale of HuaXia at the end of June. The bank reported a CRDIV fully loaded capital ratio of 10.8% and a CRDIV leverage ratio of 3.4% at end-March 2016, compared with medium-long term targets of at least 12.5% and at least 5% respectively.

### **HIGH EARNINGS VOLATILITY AND MODEST OVERALL PROFITABILITY**

Deutsche Bank's historically high levels of earnings volatility and modest profitability remain a relative weakness for the baa3 BCA. Despite the cost savings realized under the previous strategic plan, reported profitability at Deutsche Bank has remained weak, due to persistent headwinds in the form of higher litigation, regulatory, restructuring and legacy costs. Low rates are hurting margins within the retail bank (PWCC) and within the transaction bank (within CIB). Our assigned Profitability score of b1 is in line with our forecasts and reflects the challenges the bank faces over the next 12-18 months whilst it realises and accelerates disposals as part of the strategic plan.

A key pillar of the new strategy will be the restructuring program, whereby management is investing EUR3.7 billion to cut EUR3.5 billion out of the cost base which is intended to be completed in 2020. The firm will pursue savings through rightsizing and processes optimization and will disclose details of the programs in the next months.

The speed and cost of running off the non-core unit (NCOU) is an important driver of overall firm wide profitability. Losses in the unit (EUR2.7 billion in pre-tax losses in 2015, including EUR1.8 billion in litigation) have stayed elevated despite substantial runoff in RWA. The NCOU consists of portfolios of trading assets and assets reclassified under IAS 39 which are no longer core business activities; stakes in non-tradable operating companies where Deutsche Bank has influence/control; and portfolios in run-off, which require administration from Deutsche Bank.

### **DEVELOPMENT OF STRONGER AND MORE RESILIENT LINES OF BUSINESS OUTSIDE CAPITAL MARKET ACTIVITIES**

Within universal banks with extensive capital market operations, we view diversified earnings streams as a source of strategic flexibility and to absorb the expected cyclicity of capital market results over time. Deutsche Bank is attempting to rebalance its business mix and increase the contribution to earnings from more stable lines of business: retail banking (PWCC), transaction banking (within CIB) and asset and wealth management (DAWM).

Deutsche Bank operates its retail franchise across two brands, Postbank in Germany and Deutsche Bank in Germany as well as six other countries, which is incorporated under its PWCC division. Deutsche Bank intends to deconsolidate Postbank and improve the efficiency of their retail businesses. We see the deconsolidation of Postbank as credit neutral and its timing as uncertain. The subsidiary's contribution to group earnings was EUR880 million, or roughly one-third of the core retail division earnings in 2013-14. However, Postbank's liabilities also contributed EUR824 million in non-core unit (NCOU) losses during this time and these liabilities would presumably remain with Postbank. We do not view the loss of Postbank's deposits as negative, since they were ring-fenced and not freely fungible within Deutsche Bank. PWCC reported a pre-tax loss in 2015 of EUR0.8 billion compared to a EUR1 billion profit one year earlier.

Deutsche Bank's transaction banking franchise is an attractive business for bondholders. Their transaction banking business has a well-balanced revenue mix across trade finance, cash management (for corporate and financial institutions) and trust and securities services. The division is truly global - with over 70% of both clients and employees based outside Germany - and has a generally consistent track record of producing steady and growing profits for Deutsche Bank with only occasional lumpy credit or restructuring charges. Deutsche Bank targets to grow the division under Strategy 2020 through investment of more than EUR1 billion and EUR50 billion incremental leverage.

After shelving plans to divest certain asset management businesses outside Germany, Deutsche Bank recommitted to DAWM and has substantially strengthened profitability in this division since 2012, by wringing cost savings out of the business by combining three platforms (wealth management, asset management and passive fund management transferred from CB&S) into one new unit. Under Strategy 2020 Deutsche Bank plans to further expand DAWM by growing assets under management at an annual rate and increasing its relationship management staff by over 15% in key markets (Asia, the Middle East, the US and the UK) and further streamlining footprint to improve the cost-income ratio.

### **STRONG LIQUIDITY POSITION MITIGATES MARKET FUNDING RELIANCE**

Our a3 combined liquidity score highlights funding and liquidity as a relative strength for the BCA and reflects the large proportion of market funds, a consequence of the substantial capital markets activity, mitigated by a large portion of liquid resources. The firm's asset liquidity is strengthening as the firm divests non-core operations.

### **Notching Considerations**

#### **LOSS GIVEN FAILURE AND ADDITIONAL NOTCHING**

Deutsche Bank is subject to the EU Bank Resolution and Recovery Directive (BRRD), which we consider to be an Operational Resolution Regime. We assume residual tangible common equity of 3% and losses post-failure of 8% of tangible banking assets, a 25% run-off in "junior" wholesale deposits, a 5% run-off in preferred deposits. Following the parliamentary approval of the amendment to the German Banking Act (KWG), which structurally subordinates most senior unsecured debt to all forms of deposits we now assign a 100% probability of deposits being preferred to most senior unsecured debt. These are in line with our standard assumptions. We included in our balance sheet at failure our estimate of deposits and assets relating to Deutsche Bank's branches and German subsidiaries.

As a result of this scenario analysis, we believe that Deutsche Bank's deposits are likely to face extremely low loss-given-failure, due to the loss absorption provided by subordinated debt and, senior unsecured debt now that deposits will be treated preferentially in a resolution, as well as the very substantial volume of deposits themselves. This results in three notches of uplift for deposits relative to the ba1 BCA under our advanced LGF analysis.

Deutsche Bank's senior unsecured debt is rated at Baa2, reflecting one notch of uplift from the BCA due to their substantial volume resulting in a low loss-given-failure. For junior securities issued by Deutsche Bank, our LGF analysis confirms a high level loss-given-failure, given the small volume of debt and limited protection from more subordinated instruments and residual equity. We also incorporate additional notching from the BCA for junior subordinated and preference share instruments reflecting the coupon suspension risk ahead of potential failure.

#### **GOVERNMENT SUPPORT**

The implementation of the BRRD has caused us to reconsider the potential for government support to benefit certain creditors. We now expect a moderate probability of government support for Deutsche Bank's deposits and long-term debt. This results in one-notch of additional uplift beyond that derived from LGF for both debt and deposits, producing a final rating of A3 for deposits and Baa2 for debt.

For other junior securities, we continue to believe that the potential for government support is low and these ratings do not, therefore, include any related uplift.

#### **COUNTERPARTY RISK ASSESSMENT**

CR Assessments are opinions of how counterparty obligations are likely to be treated if a bank fails and are distinct from debt and deposit ratings in that they (1) consider only the risk of default rather than both the likelihood of default and the expected financial loss suffered in the event of default and (2) apply to counterparty obligations and contractual commitments rather than debt or deposit instruments. The CR assessment is an opinion of the counterparty risk related to a bank's covered bonds, contractual performance obligations (servicing), derivatives (e.g., swaps), letters of credit, guarantees and liquidity facilities.

Deutsche Bank AG's CR Assessment is positioned at A3(cr)/Prime-2(cr). The CR Assessment, prior to government support, is positioned three notches above the Adjusted BCA of ba1, based on the substantial cushion against default provided to the senior obligations represented by the CR Assessment by subordinated instruments. The main difference with our Advanced LGF approach used to determine instrument ratings is that the CR Assessment captures the probability of default on certain senior obligations, rather than expected loss, therefore we focus purely on subordination and take no account of the volume of the instrument class.

The CR Assessment also benefits from one notch of systemic support, in line with our support assumptions on deposits and senior unsecured debt. This reflects our view that any support provided by governmental authorities to a bank which benefits senior unsecured debt or deposits is very likely to benefit operating activities and obligations reflected by the CR Assessment as well, consistent with our belief that governments are likely to maintain such operations as a going-concern in order to reduce contagion and preserve a bank's critical functions.

### **About Moody's Bank Scorecard**

Our Scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our Scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The Scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

The financial data in the attached scorecard are sourced from Deutsche Bank AG's financial statements at end-March 2016.

## Rating Methodology and Scorecard Factors

Exhibit 2

### Deutsche Bank AG

#### Macro Factors

Weighted Macro Profile	Strong +	100%
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#### Financial Profile

Factor	Historic Ratio	Macro Adjusted Score	Credit Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	2.1%	a2	← →	baa3	Litigation risk	Market risk
Capital						
TCE / RWA	11.6%	baa1	← →	ba1	Expected trend	Nominal leverage
Profitability						
Net Income / Tangible Assets	0.1%	b3	↑	b1	Earnings quality	Return on assets
Combined Solvency Score		baa2		ba1		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	29.9%	baa2	← →	baa2	Extent of market funding reliance	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	40.5%	aa3	← →	a1	Quality of liquid assets	
Combined Liquidity Score		a3		a3		
Financial Profile				baa3		
Business Diversification				0		
Opacity and Complexity				-1		
Corporate Behavior				0		
Total Qualitative Adjustments				-1		
Sovereign or Affiliate constraint:				Aaa		
Scorecard Calculated BCA range				baa3-ba2		
Assigned BCA				ba1		
Affiliate Support notching				0		
Adjusted BCA				ba1		

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency rating	Foreign Currency rating
Counterparty Risk Assessment	3	0	baa1 (cr)	1	A3 (cr)	--
Deposits	3	0	baa1	1	A3	A3
Senior unsecured bank debt	1	0	baa3	1	Baa2	Baa2
Dated subordinated bank debt	-1	0	ba2	0	Ba2	Ba2
Non-cumulative bank preference shares	-1	-2	b1	0	B1 (hyb)	B1 (hyb)

Source: Moody's Financial Metrics

## Ratings

Exhibit 3

Category	Moody's Rating
<b>DEUTSCHE BANK AG</b>	
Outlook	Stable
Bank Deposits	A3/P-2
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	ba1
Counterparty Risk Assessment	A3(cr)/P-2(cr)
Issuer Rating	Baa2
Senior Unsecured	Baa2
Subordinate	Ba2
Pref. Stock Non-cumulative	B1 (hyb)
Commercial Paper -Dom Curr	P-2
Other Short Term -Dom Curr	(P)P-2
<b>DEUTSCHE BANK TRUST COMPANY AMERICAS</b>	
Outlook	Stable
Bank Deposits	A2/P-1
Baseline Credit Assessment	baa1
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	A3(cr)/P-2(cr)
Issuer Rating	Baa2
<b>DEUTSCHE POSTBANK AG</b>	
Outlook	Negative
Bank Deposits	A3/P-2
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	ba1
Counterparty Risk Assessment	A3(cr)/P-2(cr)
Senior Unsecured MTN -Dom Curr	(P)Baa2
Subordinate	Ba2
Commercial Paper -Dom Curr	P-2
Other Short Term -Dom Curr	(P)P-2

Source: Moody's Investors Service



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